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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,170	12/21/2000	Sang On Park	0465-0791P	6704

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 09/24/2003

124

Please find below and/or attached an Office communication concerning this application or proceeding.

12

Office Action Summary

Application No.

09/741,170

Applicant(s)

PARK, SANG ON

Examiner

Aristotelis M Psitos

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/16/03 & 5/23/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1=7,9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) all is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Applicant's response of has been considered with the following results.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 6/16/03 and 5/23/03 have been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1-4,7, 10, 13,,15, 16, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al further considered with Mizumoto et al.

With respect to the independent claims, Kuroda et al discloses a spindle speed control system using the separated wobble signal read from an optical disc. There is no specific mentioning that the speed control is performed in a free running state, i.e., as claimed – only with focus ability.

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Mizumoto et al discloses in this environment the ability of performing/control the spindle motor speed during such a period of operation.

It would have been obvious to modify the base system of Kuroda et al with the above teaching from Mizumoto et al, motivation is to obtain a stable spindle speed prior to energizing any of the subsequent servo systems – i.e., get the disc up to speed as well as permitting the disc to operate stably and hence permit subsequent signal recording abilities as discussed in Mizumoto et al.

With respect to claims 2,3,10,15, 16 and 20, these are considered present in the primary references, i.e., the wobble signal itself as well as the pll limitation.

With respect to claims 4 and 17, it is noted that Mizumoto et al also teaches the ability of performing this speed control for a variety of zones/specific areas across the disc, and not during others. The examiner interprets such as meeting the limitations of claims 4 and 17 (duplicate limitations) wherein the “inhibiting” ability is when the system is during those periods that no speed control is being performed.

5. Claims 5,6,11,12,18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1, 7 and 13 above, and further in view of Buchler.

The ability of detecting the wobble signal by use of optical detectors is standard and as further depicted by Buchler see col. 8 line 24 to col. In Buchler however the tzc control is performed in the te servo section.

It would have been obvious to modify the base system of the references relied above with the ability of using such window comparison and tzc for detecting the boundary of the track for the speed control because placement of the optical light spot upon the track is necessary to ensure detection of the wobble track and comparison thereof, use with the te servo components permit for better signal reproduction as taught by Buchler.

6. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,7 ad 13 above, and further in view of either themselves or Ilmura.

Kuroda et al merely designates a wobble signal detector with no particular. The examiner concludes that such elements contain the claimed limitations of claims 9 and 14 as further

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depicted by limura. Either the reference to Kuroda et al inherently possesses such limitations, or alternatively such limitations are well known for performing such abilities as taught by limura. It would have been obvious to modify the base system of Kuroda et al with the use of such standard elements for the wobble signal separator/detector, motivation is to use standard equipment and save valuable resources.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Horikiri and Ogawa are cited as illustrative of speed control using wobble signals and could be relied upon in place of Kuroda et al. Takata et al and Suzuki are cited as tzc and widow circuitry in this environment for their ability to detect the boundaries of optical tracks. Osada teaches the focusing ability subsequent to spindle lock ability and subsequently followed by the te ability.

Hard copies of the application files are now separated from this examining corps, hence the examiner can answer no questions that requires a review of the file without sufficient lead-time.

Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Aristotelis M Psitos
Primary Examiner
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A handwritten signature in black ink, appearing to read 'A. Psitos', written over the printed name.

AMP
September 16, 2003